

ENTERED

May 24, 2022

Nathan Ochsner, Clerk

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION**

§
WILCO MARSH BUGGIES AND §
DRAGLINES, INC., §
§
Plaintiff, § CIVIL ACTION NO. H-21-616
VS. §
§
HOUSTON HEAVY MACHINERY, LLC, §
§
Defendant.

MEMORANDUM OPINION ON CLAIM CONSTRUCTION

This patent infringement case presents the same construction issues that have already been addressed in a case pending in the federal district court in the Eastern District of Louisiana. Both cases involve the same patent for amphibious “marsh buggies” used in excavation to support oil and gas exploration in marshy areas. In both cases, the patent holder, Wilco Marsh Buggies & Draglines, Inc., sued entities that purchased allegedly infringing buggies manufactured by EIK Engineering SDN BHD, a Malaysian company, through the manufacturer’s domestic affiliate, EIK Engineering Corp. In the Eastern District case, Wilco sued Weeks Marine, Inc., alleging that it purchased and uses EIK manufactured buggies which infringe on its Patent. In the present case, Wilco has sued Houston Heavy Machinery, alleging that it bought infringing EIK manufactured amphibious marsh buggies and some related equipment and sold them to other companies that compete with Wilco. Wilco also sued EIK Engineering SDN BHD in the Eastern District of Texas, but has not yet properly served the Malaysian company.

In the Eastern District of Louisiana case, the parties asked the district judge to construe six disputed terms. Weeks Marine moved to have the judge reconsider two of those rulings. The judge declined to do so. In this case, the parties have filed the same proposed constructions of the

same terms. This court held a hearing on the parties' proposed constructions. Based on the ample and well-argued record, and considering the Eastern District's thoughtful approach, this court issues the following rulings construing the disputed terms.

I. Background

Wilco alleges that Houston Heavy Machinery infringed Wilco's U.S. Patent No. 6,918,801. (Docket Entry No. 1 at 18). Wilco seeks injunctive relief and damages. (Docket Entry No. 1 at 1). Houston Heavy Machinery denies infringement and willful infringement and asserts prosecution history estoppel and patent invalidity in its answer and counterclaim. (Docket Entry No. 27 at 1–2, 23, 25–26).

An amphibious vehicle, or marsh buggy, is capable of performing excavation operations on dry land, marsh land, and while floating in water. Marsh buggies typically include a pair of pontoons connected to a center platform. A series of chains with cleated tracks wraps around each pontoon and enables the vehicle to move on dry ground, swamp land, or in water. Wilco acknowledges that prior-art marsh buggies also enabled work in wetlands, marsh lands, and other low-lying set areas because they did not sink into soft soil, but, Wilco asserts, these marsh buggies could not excavate while floating. Some prior art buggies would place the heavy excavation equipment on a floating platform known as a spud barge. But a spud barge has limited use in excavating in landlocked bodies of water because the barge itself has to be floated to the excavation site. Just getting the barge to the excavation site requires tugs or other machinery, and sometimes involves digging deep canals. (Docket Entry No. 36 at 5–6).

Wilco's patent claims an amphibious vehicle that includes pontoons, a track system, and a spud system. The spuds extend to the subsea floor so that the buggy can perform excavations while floating in deeper water. The spuds are retractable so that the vehicle can travel on dry land

and in shallow areas. The Wilco invention claims to have removed the need for a separate spud barge. (Docket Entry No. 36 at 6–7).

In 2016, EIK Malaysia starting selling amphibious excavators in the United States through its domestic affiliate, EIK Engineering Corp. Houston Heavy Machinery bought an amphibious marsh buggy from EIK. The EIK buggy had side pontoons and a spud system. Houston Heavy Machinery also purchased two additional sets of side pontoon and spud systems that could be used interchangeably on other EIK marsh buggies. Wilco alleges that Houston Heavy Machinery has sold, rented, and used the infringing equipment, including selling “to other third-party service companies who are actively using these infringing machines in direct competition with Wilco.” (Docket Entry No. 36 at 8).

Frustrated in its effort to sue EIK Malaysia, Wilco sued another EIK customer, Weeks Marine, Inc., in the United States District Court for the Eastern District of Louisiana. Judge Carl J. Barbier issued a claim construction order on March 21, 2022, construing the same claim terms presented and disputed in this court. (Docket Entry No. 37-2). Judge Barbier adopted Wilco’s proposed constructions for “chassis,” “amphibious chassis,” and “connected to/attached to,” and adopted Weeks Marine’s proposed constructions for “pontoon,” “spud,” and “adapted to laterally support.” On April 18, 2022, Weeks Marine filed a motion for reconsideration of Judge Barbier’s construction of “chassis” and “amphibious chassis.” Judge Barbier denied that motion.

EIK Malaysia petitioned the Patent Trial and Appeal Board for an Inter Partes Reexamination of the ‘801 Patent. The Patent Trial and Appeal Board denied the petition in June 2020 and denied the request for a rehearing.

In this court, Wilco and Houston Heavy Machinery dispute the same claim terms that were addressed in the Eastern District case. Those terms are analyzed below.

II. Claim Construction

A. The Legal Standards

The “claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). “[T]he construction of a patent, including terms of art within its claim, is exclusively within the province of the court.” *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). Claim terms are “generally given their ordinary and customary meaning,” defined as “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips*, 415 F.3d at 1312–13 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

Claim construction begins with the claim language. *Aptalis Pharmatech, Inc. v. Apotex Inc.*, No. 2017-1344, 2018 WL 286123, at *3 (Fed. Cir. Jan. 4, 2018). The court looks first “to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention,” *Vitronics*, 90 F.3d at 1582, and construes the claim terms in the context of the surrounding claim language. *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“[T]he context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms.”); *accord Lexion Medical, LLC v. Northgate Techs., Inc.*, 641 F.3d 1352, 1356 (Fed. Cir. 2011). When the words in the context of the surrounding claim language make the ordinary meaning readily apparent, claim construction “involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314. If the “ordinary and customary” meaning is unclear, the court considers “the intrinsic evidence of record, i.e., the patent itself, including the claims, the

specification and, if in evidence, the prosecution history.” *Vitronics*, 90 F.3d at 1582. Courts review the “specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning.” *Id.* The Federal Circuit has repeatedly stated that “claims ‘must be read in view of the specification, of which they are a part.’” *Phillips*, 415 F.3d at 1315 (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996)). The specification, a “concordance for the claims,” *id.* (quoting *Autogiro Co. of Am. v. United States*, 384 F.2d 391, 397–98 (Ct. Cl. 1967)), is the “best source for understanding a technical term,” *id.* (quoting *Multiform Desiccants*, 133 F.3d at 1478).¹ “[T]he specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor.” *Id.* (citing *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343–44 (Fed. Cir. 2001)); *see also Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (the claim construction may deviate from the ordinary and customary meaning of a disputed term only if (1) a patentee sets out a definition and acts as his own lexicographer, or (2) the patentee disavows the full scope of a claim term, either in the specification or during prosecution).

“[A] court ‘should also consider the patent’s prosecution history, if it is in evidence.’” *Phillips*, 415 F.3d at 1317 (quoting *Markman*, 52 F.3d at 980); *see also Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1381 (Fed. Cir. 2011) (“[T]he specification is the primary source for determining what was invented and what is covered by the claims, elucidated if needed by the prosecution history.”). The prosecution history “can often inform the meaning of the claim

¹ *See also Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1360 (Fed. Cir. 2004) (“In most cases, the best source for discerning the proper context of claim terms is the patent specification wherein the patent applicant describes the invention.”). When the specification “reveal[s] a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess . . . the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316 (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)).

language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Phillips*, 415 F.3d at 1317 (citing *Vitronics*, 90 F.3d at 1582–83). The prosecution history includes “all express representations made by or on behalf of the applicant to the examiner to induce a patent grant, or . . . to reissue a patent . . . includ[ing] amendments to the claims and arguments made to convince the examiner that the claimed invention meets the statutory requirements of novelty, utility, and nonobviousness.” *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985); *see also Sanofi-Aventis Deutschland GmbH v. Genentech, Inc.*, 473 F. App’x 885, 888 (Fed. Cir. 2012) (“We have held that an otherwise broadly defined term can be narrowed during prosecution through arguments made to distinguish prior art.”) (citing *Phillips*, 415 F.3d at 1317 (“The prosecution history . . . consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent.”)).

“The doctrine of prosecution disclaimer is well established in Supreme Court precedent, precluding patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003); *see also SanDisk Corp. v. Memorex Prods., Inc.*, 415 F.3d 1278, 1286 (Fed. Cir. 2005). The doctrine applies even if the disclaimers were not necessary to make the invention patentable. *See Uship Intellectual Props., LLC v. United States*, 714 F.3d 1311, 1315 (Fed. Cir. 2013) (“We find no support for [the] proposition that prosecution disclaimer applies only when applicants attempt to overcome a claim rejection. Our cases broadly state that an applicant’s statements to the PTO characterizing its invention may give rise to a prosecution disclaimer.”); *cf. Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1583 (Fed. Cir. 1995) (“Estoppel extends beyond the basis of

patentability. . . Clear assertions made during prosecution in support of patentability, whether or not actually required to secure allowance of the claim, may also create an estoppel.”) (citing *Tex. Instruments, Inc. v. U.S. Int'l Trade Comm'n*, 988 F.2d 1165 (Fed. Cir. 1993)).² Prosecution disclaimer does not apply “where the alleged disavowal of claim scope is ambiguous.” *Omega Eng'g*, 334 F.3d at 1324; *see also id.* at 1325 (“[W]e have required the alleged disavowing statements to be both so clear as to show reasonable clarity and deliberateness and so unmistakable as to be unambiguous evidence of disclaimer.”) (citations omitted). Only when “the patentee has unequivocally disavowed a certain meaning to obtain his patent [does] the doctrine of prosecution disclaimer attach[] and narrow[] the ordinary meaning of the claim congruent with the scope of the surrender.” *Id.* at 1324.

Courts may also “rely on extrinsic evidence, which ‘consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.’” *Phillips*, 415 F.3d at 1317 (quoting *Markman*, 52 F.3d at 980). Although extrinsic

² “There is a clear line of distinction between using the contents of the prosecution history to reach an understanding about disputed claim language and the doctrine of prosecution history estoppel which ‘estops’ or limits later expansion of the protection accorded by the claim to the patent owner under the doctrine of equivalents when the claims have been purposefully amended or distinguished over relevant prior art to give up scope. . . . [T]he two uses of the prosecution history must not be confused.” *Bidex Corp. v. Loredan Biomedical, Inc.*, 946 F.2d 850, 862 (Fed. Cir. 1991) (citations and internal quotation marks omitted); *see also Ballard Med. Prods. v. Allegiance Healthcare Corp.*, 268 F.3d 1352, 1358–59 (Fed. Cir. 2001) (distinguishing the two); *Spectrum Int'l Corp. v. Sterilite Corp.*, 164 F.3d 1372, 1378 n.2 (Fed. Cir. 1998) (same). “Just as prosecution history estoppel may act to estop an equivalence argument under the doctrine of equivalents, positions taken before the PTO may bar an inconsistent position on claim construction.” *Ballard Med. Prods.*, 268 F.3d at 1359 (quoting *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1457 (Fed. Cir. 1998)) (alteration omitted). When the accused infringer argues that the prosecution history results in a narrowing of a claim’s scope, there is no difference, and the Federal Circuit has refused to reverse based on references to estoppel. *See id.* at 1359 (“Because the substance of the district court’s analysis was sound, we disregard the fact that the court used the term ‘prosecution history estoppel’ in an unconventional manner.”); *Bidex Corp.*, 946 F.2d at 862–63 (observing that “Bidex is technically correct in asserting that the doctrine of prosecution history estoppel is ‘irrelevant’ to determination of literal claim scope” but upholding the district court because prosecution history is relevant to claim interpretation) (citation omitted).

evidence “‘can shed useful light on the relevant art,’ it is ‘less significant than the intrinsic record in determining the legally operative meaning of claim language.’” *Zircon Corp. v. Stanley Black & Decker, Inc.*, 452 F. App’x 966, 972–73 (Fed. Cir. 2011) (quoting *Phillips*, 415 F.3d at 1317). Extrinsic evidence is “in general . . . less reliable than the patent and its prosecution history” because it is “not part of the patent” and was not created in patent prosecution: “extrinsic publications may not be written by or for skilled artisans”; and expert reports and testimony created later, for litigation, may “suffer from bias not present in intrinsic evidence.” *Phillips*, 415 F.3d at 1318. A court must use “sound discretion” in admitting and using extrinsic evidence. *Id.* at 1319; *see also Seattle Box Co. v. Indus. Crating & Packing, Inc.*, 731 F.2d 818, 826 (Fed. Cir. 1984) (“A trial judge has sole discretion to decide whether or not [s]he needs, or even just desires, an expert’s assistance to understand a patent. We will not disturb that discretionary decision except in the clearest case.”).

“[E]xtrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” *Phillips*, 415 F.3d at 1319. Although a court may consider extrinsic evidence, it must not relegate the intrinsic evidence to a mere “check on the dictionary meaning of a claim term.” *Id.* at 1320–21 (noting that relying on dictionaries “too often” causes “the adoption of a dictionary definition entirely divorced from the context of the written description”). “The sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law.” *Id.* at 1324 (citing *Vitronics*, 90 F.3d at 1582).

B. A Person of Ordinary Skill in the Art

Wilco and Houston Heavy Machinery have agreed that the disputed terms should be given their ordinary and customary meaning. Ordinary and customary meaning is the meaning understood by a person of ordinary skill in the art when read in the context of the entire patent. *Phillips*, 415 F.3d 1303, 1313 (Fed. Cir. 2005), *cert denied*, 546 U.S. 1170 (2006); *FenF, LLC v. SmartThingz, Inc.*, 601 F. App'x 950, 952 (Fed. Cir. 2015). Both parties have provided slightly different descriptions of a person of ordinary skill in the art through their respective experts. However, Houston Heavy Machinery does not anticipate the slight differences to materially affect claim construction. (Docket Entry No. 37 at 10).

Wilco designated William T. Bennett, Jr., a naval architect and engineer, as its expert. (Docket Entry No. 36-7 at 1-2). Bennett did not provide a description of a person of ordinary skill in the art for this patent, but explained that his own statements represent those of a person of ordinary skill in the art. Instead, John Wilson Jr., the co-inventor of the patent, provided the following definition:

I would consider someone of ordinary skill in the art to have at least a high school diploma and a minimum of ten-year's experience working with amphibious vehicles, marsh buggies, hovercraft, and small industrial craft, such as for instance crew boats. Alternatively, one of ordinary skill in the art could have a bachelor's degree in engineering and at least five years of the same or related experience.

(Docket Entry No. 36-2 at 2, 5).

Houston Heavy Machinery designated Dr. Patrick Hudson, PhD, as its expert to testify about a person of ordinary skill in the art. (Docket Entry No. 37-5). Hudson provided the following definition:

It is my opinion that a person of ordinary skill in the art (POSA) is a person possessing at least a bachelor's degree in mechanical engineering or naval architecture, combined with at least three years

of experience in the design, fabrication, or operation of marine vehicles. Alternatively, one skilled in the art could be a person with at least seven years of experience in the design, fabrication, or operation of marine vehicles without possessing a bachelor's degree in a related scientific or engineering discipline.

Neither party challenges the other's designated expert is unqualified to testify about the understanding of a person of ordinary skill in the art.

C. Claims Construction Analysis

The parties dispute the terms in the '801 Patent set out in **bold**:

1. A vehicle comprising:

A chassis;

At least two **pontoons** supported by said chassis, wherein said pontoons provide sufficient buoyancy such that the vehicle can float in water;

A track system disposed on said pontoons and adapted to provide propulsion to the vehicle when moving on land or in water;

A plurality of spuds **connected to** said chassis, wherein said **spuds** have a first position wherein said spuds extend below the bottom of said pontoons and a second position wherein said spuds do not extend below the bottom of said pontoons.

2. Repeated term **chassis**.

...

5. Repeated term **spud(s)**.

...

8. Repeated terms **chassis, spud(s), connected to/attached to**.

9. Repeated term **spud(s)**.

...

12. A vehicle comprising:

An **amphibious chassis** including pontoons fitted with powered track systems adapted to provide propulsion to the vehicle both on land and in water;

A plurality of spud assemblies **attached to** said amphibious chassis; and

Equipment mounted to said amphibious chassis, wherein said equipment has a first operating mode wherein the vehicle is resting on the ground and a second operating mode wherein the vehicle is floating in water, wherein said plurality of spud assemblies retract entirely above the bottom of the pontoons in the first operating mode and are **adapted to laterally support** the vehicle in the second operating mode.

...

18. Repeated terms **spud(s), connected to/attached to.**

(Docket Entry No. 36-1).

1. “Chassis” (Claims 1, 2, 8)

Wilco’s proposed construction for “chassis” in Claims 1, 2, and 8 is “the supporting frame of a vehicle, exclusive of the body or housing.” Houston Heavy Machinery’s proposed construction is “a structure for supporting other components.” The parties agree that “chassis” should be given its ordinary meaning as understood by a person of ordinary skill in the art when read in the context of the Patent.

Wilco argues that Houston Heavy Machinery’s definition of “chassis” is too broad, as it would include any type of support structure and does not have a specific reference to the applicable field of technology. Houston Heavy Machinery argues that Wilco’s definition is inconsistent with the language of the claims. The dispute is whether “chassis” excludes body or housing.

Judge Barbier adopted Wilco’s construction, concluding that it was consistent with the Patent and the ordinary meaning of “chassis,” and that Weeks Marine’s opposing definition was too broad. (Docket Entry No. 37-2 at 9). “[P]revious claim constructions in cases involving the same patent are entitled to substantial weight,” and courts generally do not depart from those constructions absent a strong reason for doing so. *TQP Dev., LLC v. Intuit Inc.*, No. 2:12-CV-180-

WCB, 2014 WL 2810016, at *6 (E.D. Tex. June 20, 2014). “In general . . . prior claim construction proceedings involving the same patents-in-suit are ‘entitled to reasoned deference under the broad principals of stare decisis and the goals articulated by the Supreme Court in *Markman*, even though stare decisis may not be applicable per se.’” *United Servs. Auto. Ass’n v. PNC Bank N.A.*, No. 2:21-CV-00246-JRG, 2022 U.S. Dist. LEXIS 47750, at *12 (E.D. Tex. Mar. 17, 2022). In the motion for reconsideration, Weeks Marine argued that Wilco’s definition imports a negative limitation that is not in the specification and that creates a conflict with the language “amphibious chassis including pontoons” in Claim 12. Mot. for Partial Recons., *Wilco Marsh Buggies and Draglines, Inc. v. Weeks Marine*, No. 20-3135 (E.D. La. April 18, 2022).

a. The Dictionary Definitions

Merriam Webster defines “chassis” as “the supporting frame of a structure (such as an automobile or television” and “the frame and working parts (as of an automobile or electronic device) exclusive of the body or housing.” (Docket Entry No. 36-3 at 3). Wilco argues that “frame” is the common term in these definitions. Merriam Webster defines “frame” in part as “a structural unit in an automobile chassis supported on the axles and supporting the rest of the chassis and the body.” (Docket Entry No. 36-4 at 5). Wilco argues that the definition of “frame” makes clear that a “chassis” is distinguishable from the “body” of a vehicle. Houston Heavy Machinery argues that Wilco ignores the Merriam Webster primary definition, which is “the supporting frame of a structure.”

Dictionaries, encyclopedias, and treatises are “objective resources that serve as reliable sources of information on the established meanings that would have been attributed to the terms of the claims by those of skill in the art,” and they “deserve no less fealty in the context of claim construction” than in any other area of law. *Phillips*, 415 F.3d 1303, 1319 (Fed. Cir. 2005)

(quoting *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202–03 (Fed. Cir. 2002)). But extrinsic evidence is “less significant than the intrinsic record in determining ‘the legally operative meaning of claim language.’” *Id.* at 1317. When there are multiple dictionary definitions of a term, the court should construe the definitions “in a manner which is consistent with [the term’s] use in the intrinsic record.” *On Demand Mach. Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 1338 (Fed. Cir. 2006). “If more than one dictionary definition is consistent with the use of the words in the intrinsic record, . . . ‘the claim terms may be construed to encompass all such consistent meanings.’” *Phillips*, 415 F.3d 1303, 1319 (Fed. Cir. 2005). The court must review the intrinsic record “to determine which of the different possible dictionary meanings is most consistent with the use of the term in question by the inventor.” *Id.*

b. The Intrinsic Record

Wilco points to the specification, which describes one preferred embodiment as:

an amphibious spud barge 10 is shown including a chassis 12 and a hydraulic excavator 14. **Hydraulic excavator 14 is preferably mounted to a chassis cross member 15.** **Chassis 12 includes two pontoons 16,** which are **connected by chassis cross member 15** and equipped with endless-chain track systems 18 having a plurality of cleats 20. . . . Pontoons 16 are preferably constructed so as to provide adequate buoyancy to enable barge 10 to float in water.

(Docket Entry No. 36-1 at 8). Wilco argues that because the patent distinguishes between the “chassis” on the one hand and the “hydraulic excavator”, its body, bucket, and other elements on the other hand, the excavator and its elements are not part of the chassis.

Houston Heavy Machinery responds that Wilco’s proposal to add “exclusive of the body or housing” is a negative limitation not supported by the specification. (Docket Entry No. 37 at 12). The word “housing” is not found in the ‘801 Patent, and the word “body” is used in the Patent only in reference to a “body of water” and to an “elongated body” of the spuds, (Docket Entry No. 37-1 at 4, 5).

Neither argument is persuasive. First, although the word “body” is not used in the specification, it is used in the dictionary definition of “chassis,” suggesting that this exclusion is part of the plain meaning. Second, there is no inconsistency between Wilco’s definition of chassis and its application to “amphibious chassis” as used in Claim 12, as Houston Heavy Machinery argues.

Claim 12 reads:

A vehicle comprising:

An **amphibious chassis including pontoons** fitted with powered track systems adapted to provide propulsion to the vehicle both on land and in water[.]

(Docket Entry No. 36-1 at 9). Houston Heavy Machinery argues that because Wilco concedes that a “pontoon” is a “body,” an amphibious chassis cannot be “exclusive of [a] body or housing,” yet also include pontoons as described in Claim 12. (Docket Entry No. 37 at 12).

Houston Heavy Machinery cites to *Landis on Mechanics of Patent Claim Drafting*, which explains that “where material to the claim, one must describe such features as (1) the constituent parts of the element and how they are related,” and that “[i]t is ordinarily best to describe all of the salient features of each element in the clause pertaining to that element.” Robert C. Faber, *Landis on Mechanics of Patent Claim Drafting*, 5th Ed. New York: Practising Law Institute, 2005 (Docket Entry No. 37-12). Another writer explains:

More than one element can be introduced within a single clause when the latter elements are subelements of the main element claim. Subelements should be introduced by a transition word that suggests that they are a portion of the first named element, for example, “a container [first element] **having [or including, comprising, etc.]** a plurality of legs [second element].”

Jeffrey G. Sheldon, *How to Write a Patent Application*. New York, NY: Practicing Law Institute, 2005 (Docket Entry No. 37-13). Houston Heavy Machinery argues that Claim 12 shows that

pontoons are a subelement of the overall amphibious chassis because “pontoons” is in the same clause as the primary claim element, “amphibious chassis,” and is introduced by the word “including.”

Wilco explains that the terms “amphibious chassis” and “chassis” are used interchangeably in Claim 12, so there is no special or separate meaning for “amphibious chassis.” Wilco argues that “amphibious” clarifies only that the referenced “chassis” is “configured for a vehicle that can operate on land and water.” (Docket Entry No. 36 at 17).

Houston Heavy Machinery’s argument about amphibious chassis ignores that even if the word “chassis” in Claim 12 is interpreted as including pontoons, and the pontoons are “watertight bodies,” these are not “the body or housing” of the vehicle. And even if pontoons are part of the body or housing, the amphibious chassis described in Claim 12, which is “capable of operating on land and in water,” may be equipped with additional pieces that are not included in the term “chassis” when used without the “amphibious” modifier.

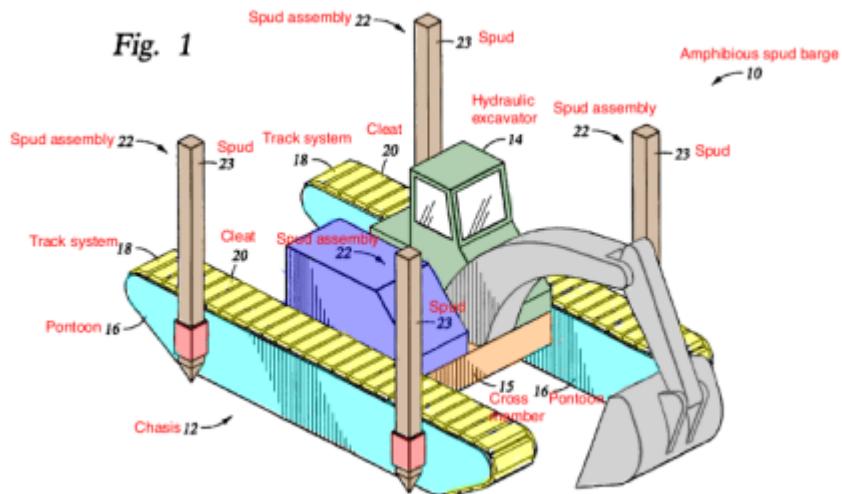
Houston Heavy Machinery also cites to the following references in the specification, arguing that they show that pontoons are a sub-element of the chassis:

- Abstract: “The vehicle includes a chassis **formed by two interconnected pontoon sections** sized such that the chassis and equipment will float.”
- 2:28-31: “The chassis **is formed by two interconnected pontoon** sections, which are sized such that the chassis and equipment will float and are fitted with an endless-chain track system having cleats that provide propulsion either on land or in the water.”
- 2:62-64: “In another embodiment, the vehicle includes **an amphibious chassis having pontoons** fitted with powered track systems and a plurality of spud assemblies.”
- 4:7-13: “Referring now to FIG. 1, an amphibious spud barge 10 is shown including a chassis 12 and a hydraulic excavator 14. Hydraulic excavator 14 is preferably mounted to a chassis 10 cross member

15. Chassis 12 includes two pontoons 16, which are connected by chassis cross member 15 and equipped with endless-chain track systems 18 having a plurality of cleats 20.”

Even if the chassis includes pontoons, as described in the specifications, Houston Heavy Machinery has not shown how this is inconsistent with Wilco’s definition, which excludes “the body or housing,” rather than any part or body.

Houston Heavy Machinery also argues that Figure 1 of the ‘801 Patent identifies the chassis, designated as “12”, as encompassing the entire substructure of the amphibious vehicle, including the pontoons:



Wilco described Figure 1 as showing an amphibious spud barge, and the patent describes spud barges as “essentially floating platforms.” (Docket Entry No. 37-1 at 7). Houston Heavy Machinery argues that a chassis of a spud barge must include its hull structure to provide buoyancy and floatation and support other components. But Houston Heavy Machinery acknowledges that the “hull” and the “pontoons” are different. The hull is the body, the pontoons are a different watertight body that provides buoyancy. Houston Heavy Machinery has not explained why the chassis must include a hull, even if the hull is buoyant, when the pontoons also provide buoyancy.

And Houston Heavy Machinery has not provided a basis for interpreting “the body or housing” to cover all parts attached to or included in the chassis.

In sum, although the embodiments and the specification describe the chassis as “floating” and as having pontoons attached, the pontoons are not the body or housing. Wilco’s proposed construction of chassis is consistent with this description.

Houston Heavy Machines also cites to the references in the ‘801 Patent specification describing the chassis as providing a support function:

- “In one embodiment, the vehicle includes a chassis **supporting** at least two pontoons providing sufficient buoyancy such that the vehicle can float on water.” (‘801 Patent, 2:34-36)
- “A piece of earth excavating equipment, such as a hydraulic excavator or a dragline, maybe **supported by** the chassis.” (‘801 Patent, 2:38-40)
- “A vehicle comprising . . . at least two pontoons **supported by** said chassis” (‘801 Patent, 5:60-62)
- “The vehicle of claim 1, further comprising a piece of earth excavating equipment **supported by** said chassis.” (‘801 Patent, 6:6-7).

Wilco does not dispute that the construction includes “supporting.” These references do not show that Wilco’s proposed construction is inconsistent with the specification. Wilco’s definition is consistent with construing “chassis” as the frame that connects the pontoons but does not include the body or housing.

c. Related Patents

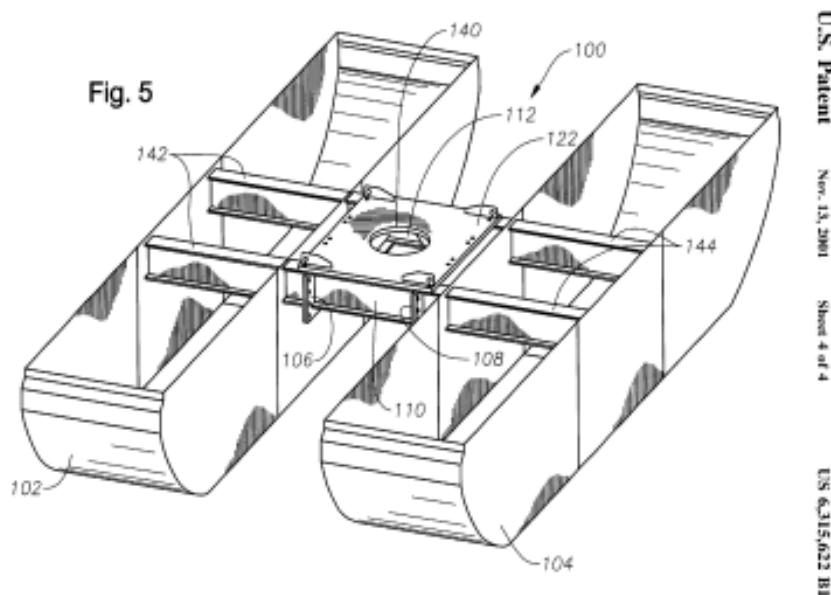
Wilco argues that its proposed construction is consistent with how the term has been defined by Wilco in related patents. The ‘622 Patent includes a specific embodiment of a chassis adapted for use with amphibious vehicles. Wilco argues that the ‘801 Patent, the ‘622 Patent, and the ‘942 Patent “all refer to the chassis as a structural frame composed of I-beams or cross beams, or cross members that form a platform for supporting excavating or similar machinery and

connecting two pontoons.” (Docket Entry No. 36 at 14). Wilco argues that these patents do not include the body or housing of the supported equipment when referring to a chassis.

Houston Heavy Machinery urges that the court cannot rely on the ‘622 and ‘942 Patents because they have no familial relationship with the ‘801 Patent, although they were also assigned to Wilco. Houston Heavy Machinery has the better argument. The Federal Circuit has explained that claims in an unrelated patent “shed[] no light on” the claims of the patent at issue. *e.Digital Corp. v. Futurewei Techs., Inc.*, 772 F.3d 723, 727 (Fed. Cir. 2014) (quoting *Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1211 (Fed. Cir. 2002), abrogated by *Phillips*, 415 F.3d 1303 (Fed. Cir. 2005)). “[T]he relationship between two unrelated patents, although having common subject matter, a common inventor, and the same assignee,” is “insufficient to render particular arguments made during prosecution of [one of the patents] equally applicable to the claims of [the other patent].” *Texas Digital*, 308 F.3d at 1211 (quoting *Abbott Labs. v. Dey, L.P.*, 287 F.3d 1097, 1104 (Fed. Cir. 2002)).

Houston Heavy Machinery argues that even if the ‘622 and ‘942 Patents could be considered, the ‘622 Patent identifies a chassis as including a housing. Mr. Wilson testified that the ‘622 Patent identifies the chassis as providing additional flotation and buoyancy and functioning as a hull. Houston Heavy Machinery argues that the ‘622 Patent has a chassis with a housing, so it would not fit into Wilco’s proposed definition of “the supporting frame of a vehicle, exclusive of the body or housing.”

Figure 5 of the ‘622 Patent shows supportive cross members 144 of the pontoons 102 and 104 connected to chassis beams 110 and 112.



Even if Houston Heavy Machinery is correct about how “chassis” is used in the ‘622 patent, the precedent is clear that claims in unrelated patents are irrelevant. Similarly, Houston Heavy Machinery’s argument that the U.S. Army LARC-LX, a well-known army vehicle, had a body as part of the chassis is unconvincing.

d. A person of ordinary skill in the art

Wilco also relies on the declaration of William T. Bennett, a naval architect and engineer who qualifies as a person of ordinary skill in the art. Bennett explains in his declaration that “the body of a vehicle, or housing, although supported by the chassis, does not form part of the chassis,” and that “[i]n maritime applications, a hull of a vessel, similar to a housing, is not ordinarily considered a part of the chassis.” (Docket Entry No. 36 at 15 (quoting Docket Entry No. 36-7 at 8).

Houston Heavy Machinery points to the statement of Dr. Patrick J. Hudson, its expert, explaining that a “chassis” does not have a special meaning within the marine industry. (Docket

Entry No. 37 at 15 (citing Docket Entry No. 37-3 at 12)). Hudson explained that the court should rely on the Merriam-Webster definition.

“[E]xtrinsic evidence in general, and expert testimony in particular, may be used only to help the court come to the proper understanding of the claims; it may not be used to vary or contradict the claim language.” *Vitronics*, 90 F.3d at 1584. Where the patent documents are unambiguous, expert testimony on the meaning of a claim is entitled to no weight. *Id.* “Any other rule would be unfair to competitors who must be able to rely on the patent documents themselves, without consideration of expert opinion that then does not even exist, in ascertaining the scope of a patentee’s right to exclude.” *Id.* (quoting *Southwall Techs.*, 54 F.3d at 1578). The court does not need the expert testimony to interpret the meaning of “chassis” in the Patent. Even if the court considered the expert testimony, Dr. Hudson supports that the court should rely on the ordinary meaning, and Bennett’s definition is consistent with the court’s interpretation.

e. Inventor Opinion

John Wilson, Jr., an inventor on the ‘801 Patent, supports Wilco’s proffered construction, explaining that the term “chassis” was specially chosen for its well understood meaning “like the chassis of a motor vehicle, it does not include the exterior body of the vehicle.” (Docket Entry No. 36-2 at 5). “[I]nventor testimony as to the inventor’s subjective intent is irrelevant to the issue of claim construction.” *Howmedica Osteonics Corp. v. Wright Med. Tech., Inc.*, 540 F.3d 1337, 1346-47 (Fed. Cir. 2008). Wilson’s testimony as to his intent is irrelevant.

Construction: Wilco’s construction of “the supporting frame of a vehicle, exclusive of the body or housing,” is consistent with the Patent and the more specific dictionary definition excluding the body. The court adopts Wilco’s construction, which is consistent with Judge Barbier’s analysis and conclusion.

2. “**Amphibious chassis**” or “**amphibious chassis including pontoons.**” (Claim 12)

Wilco’s proposed construction of “amphibious chassis” is “the supporting frame of a vehicle, exclusive of the body or housing, capable of operating on land and in water.” Houston Heavy Machinery’s proposed construction of “amphibious chassis” is “a structure, including pontoons, for supporting other components on land and water.”

Wilco argues that pontoons cannot be part of the definition of the chassis because they are included separately in Claim 12, and to include them in the definition of “amphibious chassis” would make the language in Claim 12 superfluous. *Information Techs., Inc. v. Research in Motion Ltd.*, 764 F.3d 1392 (Fed. Cir. 2014) (favoring a construction that does not render another limitation “superfluous”). Claim 12 would read, in part, as follows:

A vehicle comprising: A [a structure, **including pontoons**, for supporting other components on land and water] including pontoons fitted with powered track systems adapted to provide propulsion to the vehicle both on land and in water.

Wilco also noted that counsel for Houston Heavy Machinery conceded during the *Markman* hearing in the Eastern District case that the court should remove “including pontoons” from its proffered construction. (Docket Entry No. 57-12 at 4). Judge Barbier adopted Wilco’s proposed construction of amphibious chassis, concluding that “including pontoons” was unnecessary and would make the language in Claim 12 redundant. (Docket Entry No. 37-2 at 10).

In light of this, Houston Heavy Machinery now proposes construing “amphibious chassis including pontoons” as a single term. However, the term “pontoons” is already one of the contested terms. Providing a different definition to the term when used in conjunction with “amphibious chassis” is not supported in the text and would only confuse.

Construction: The court adopts Wilco’s proposed construction of amphibious chassis. It is unnecessary to add “including pontoons.” The only remaining difference between the proposed

constructions of “amphibious chassis” is Wilco’s “capable of operating on land and in water” or Houston Heavy Machinery’s of “on land and water.” The parties agreed in the Eastern District case that “amphibious” means the ability to operate on land and water, so the remaining language does not seem to be disputed.

3. “Pontoon” (Claims 1, 12)

Wilco’s proposed construction of “pontoon” is “an independent watertight body that provides flotation or buoyancy.” Houston Heavy Machinery’s proposed construction is a “watertight structure that provides buoyancy.” The dispute is whether a pontoon is an independent body that provides floatation. Judge Barbier adopted Houston Heavy Machinery’s proposed construction.

Houston Heavy Machinery argues that “floatation” should not be included in the construction of “pontoon,” because, as the Houston Heavy Machinery expert explained, “[a] pontoon could provide both buoyancy and flotation, or could provide buoyancy without flotation, but there would be no situation where a pontoon could provide flotation without buoyancy.” (Docket Entry No. 37-3 at 21). Houston Heavy Machinery’s expert testified that a pontoon would float when dropped in the water. But the issue is not whether the pontoon itself floats, but whether it “provides floatation.” And, as Houston Heavy Machinery explains, a single pontoon does not provide floatation for the overall apparatus because two pontoons are required to provide floatation. A pontoon may still be buoyant and be able to independently contribute to buoyancy even if it cannot provide floatation to the overall apparatus on its own.

Wilco’s expert, Mr. Bennett, explained that pontoons never share a structural wall with the hull of a vessel, while sponsons always share a structural wall with the vessel hull. (Docket Entry No. 37-9 at 3). Wilco proposes to distinguish between a sponson and pontoon by construing

“pontoon” as an independent watertight body, meaning without a shared structural wall with the vessel. Houston Heavy Machinery points to the Merriam Webster dictionary definition of “sponson,” as “an air chamber along a watercraft (such as a canoe) to increase stability and buoyancy.” (Docket Entry No. 36-7). Houston Heavy Machinery explains that sponsons on canoes do not necessarily share a structural wall with the vessel hull but sometimes are attached to the outside of the canoe. Houston Heavy Machinery argues that the lack of a shared structural wall does not distinguish between “sponsons” and “ pontoons,” so it does not provide a basis for including the term “independent” here.

Judge Barbier explained that “independent” does not meaningfully modify “watertight body,” and that buoyancy and floatation seem to have similar meanings. Although buoyancy and flotation may have different meanings in this context, Wilco has not shown that “independent” or “floatation” are necessary to, or consistent with, the meaning of “pontoon” as used in the ‘801 Patent.

Construction: The court adopts Houston Heavy Machinery’s construction of pontoon as “a water-tight structure that provides buoyancy.”

4. “Spud(s)” (Claims 1, 5, 8, 9, 18)

The parties agree that a spud is a piling. Houston Heavy Machinery argues that the term’s plain and ordinary meaning is “a piling or stake.” Wilco agrees that Houston Heavy Machinery’s definition is consistent with the ordinary meaning, but argues that the term has taken on the specialized meaning of requiring that the spud be “sufficient to stabilize an amphibious vehicle against lateral movement.” (Docket Entry No. 36 at 22). Wilco’s proposed construction diverges from the ordinary meaning. There are two exceptions to the general rule that claim terms are construed according to their plain and ordinary meaning: “1) when a patentee sets out a definition

and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution.” *Team Worldwide Corp. v. Wal-Mart Stores, Inc.*, 2018 WL 1353116, at *3 (E.D. Tex. 2018). To act as its own lexicographer, the patentee must “clearly set forth a definition of the disputed claim term,” and “clearly express an intent to define the term.” *Id.* at *4 (citations omitted). “[T]he standard for disavowal is exacting, requiring clear and unequivocal evidence that the claimed invention includes or does not include a particular feature”; “[a]mbiguous language cannot support disavowal.” *Poly-America, L.P. v. API Industries, Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016).

Wilco has not shown that the patent supports going outside the ordinary and plain meaning of “spud.” The “Background of the Invention” section describes spud barges as fitted with “pilings, known as spuds, [that] fix the horizontal location of the barge during operations.” (Docket Entry No. 36-1 at 1:67). Wilco points to language in the specification describing the functionality of the spuds in the context of the preferred embodiment shown in Figure 1: “The spuds 23 are of sufficient strength to provide lateral support to the floating barge 10 to keep the barge in one position by resisting the forces both from water motion (e.g. current, tides, waves) and from the operations of the equipment on the barge 10.” (Docket Entry No. 37-1 at 8). The patent appears to describe the functionality of a “spud” so that a person of ordinary skill in the art would be able to replicate the invention with the information contained in the patent, rather than to narrow the scope of the term “spud(s).” And although claims must be read in light of the patent’s specifications, this does not mean that every specification must be applied to the claim construction. *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1326 (Fed. Cir. 2002) (quoting *Raytheon Co. v. Roper Corp.*, 724 F.2d 951, 957 (Fed. Cir. 1983)).

Houston Heavy Machinery also notes that the “adapted to laterally support” functional limitation is used only in Claim 12. Wilco’s proposed definition of “spud” would make the last clause of Claim 12 read “a piling sufficient to stabilize an amphibious vehicle against lateral movement” that is “adapted to laterally support the vehicle in the second operating mode.” (Docket Entry No. 37-1 at 10). This proposed definition of “spud” would make the last clause of Claim 12 superfluous.

Construction: In light of what is contained in the patent and the requirement for construing terms according to their plain and ordinary meaning, the term “spud” is defined as a “piling or stake.”

5. “Connected to; attached to” (Claims 1, 8, 12, 18)

Houston Heavy Machinery agreed to Wilco’s proposed claim construction in its claim construction brief. (Docket Entry No. 37 at 29). The agreed construction for the terms “connected to” and “attached to” is “joined or linked together.”

6. “Adapted to laterally support” (Claim 12)

Wilco’s proposed construction is “configured to provide side-to-side restraint in any direction along the waterplane.” Houston Heavy Machinery’s proposed construction is “configured to provide side-to-side constraint.” The parties agree that there is no meaningful difference between constraint or restraint. The parties disagree on whether “laterally” means that the force can come from any direction along the water plane, or whether it means that the force just comes from the sides.

Merriam-Webster’s defines lateral as “of or relating to the side,” “situated on, directed toward, or coming from the side,” and “extending from side to side.” (Docket Entry No. 37-10 at 3). Claim 12 reads:

A vehicle comprising: an amphibious chassis including pontoons fitted with powered track systems adapted to provide propulsion to the vehicle both on land and in water; a plurality of spud assemblies attached to said amphibious chassis, and equipment mounted to said amphibious chassis, wherein said equipment has a first operating mode wherein the vehicle is resting on the ground and a second operating mode wherein the vehicle is floating in water, wherein said **plurality of spud assemblies** retract entirely above the bottom of the pontoons in the first operating mode and **are adapted to laterally support the vehicle in the second operating mode.**

(Docket Entry No. 37-1 at 9–10).

Wilco argues that it is well understood in the art that lateral loads are horizontal forces that impact an object, and these loads originate from various directions along the water plane. The specification explains that the spuds “are of sufficient strength to provide lateral support to the floating barge to keep the barge in one position by resisting the forces both from water motion (e.g., current, tides, waves) and from the operations of the equipment.” (Docket Entry No. 37-1 at 8). Wilco explains that these forces can come from varying sources and directions, including wind, current, waves, or the excavating force, and not merely from one side. Wilco argues that to keep the vehicle in “one position,” the lateral support must restrain forces from all directions. (Docket Entry No. 36 at 26).

“Lateral” relates to the side or sides, or is the side part of something. While forces may come from any direction, lateral support refers to support against forces coming from the side. The patent does not describe the direction of the forces beyond using the word lateral. Wilco’s proposed language changes the ordinary meaning of lateral to include “side by side restraint in any direction along the waterplane.”

Construction: Adapted to laterally support means “configured to provide side-to-side constraint.”

III. Conclusion

The parties have not shown that the court should depart from Judge Barbier's conclusions. Wilco's proposed constructions for "chassis," and "amphibious chassis" are adopted. Houston Heavy Machinery's proposed constructions for "pontoon," "spud," and "adapted to laterally support" are adopted.

SIGNED on May 24, 2022, at Houston, Texas.



Lee H. Rosenthal
Chief United States District Judge